

Serial No. 10/725,132  
November 9, 2005  
Reply to the Office Action dated August 9, 2005  
Page 6 of 9

REMARKS/ARGUMENTS

Claims 1, 2, 4-6 and 8-19 are pending in this application. By the amendment, Applicant amends claims 1 and 5, cancels claims 3 and 7, and adds new claims 14-19.

Applicant appreciates the Examiner's indication that claims 3 and 8 would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims.

Claim 1 has been amended to recite the features of claim 3, and new claim 14 corresponds to claim 8 rewritten in independent form including all of the features of claim 5, as originally filed. Accordingly, Applicant respectfully submits that claims 3 and 14 are allowable.

Claims 1, 2, 4-7 and 9-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art Figs. 7 and 8 (AAPA) in view of Helms et al. (U.S. 3,462,577). As noted above, claim 1 has been amended to recite the features of claim 3. Thus, Applicant respectfully submits that claim 1 and claims 2, 4 and 12, which depend on claim 1, are allowable. Claim 7 has been canceled. Applicant respectfully traverses the prior art rejection of claims 5, 6, 9-11 and 13.

Claim 5 has been amended to recite:

"A resistance welding apparatus, comprising:  
a welding power source;  
a first welding electrode for clamping a lead wire; and  
a plurality of second welding electrodes; wherein  
the first welding electrode and the second welding  
electrodes are connected to the welding power source, and by passing  
currents through the second welding electrodes from the first welding  
electrode via the lead wire and a metal member, the lead wire and the  
metal member are bonded to each other via resistance welding; and  
the resistance welding apparatus further comprises an  
**inspection lead-wire chuck for checking a bonding strength between  
the lead wire and the metal member by clamping and pulling the lead  
wire.**" (emphasis added)

With the unique combination and arrangement of features recited in Applicant's

Serial No. 10/725,132  
November 9, 2005  
Reply to the Office Action dated August 9, 2005  
Page 7 of 9

claim 5, including the feature of "an inspection lead-wire chuck for checking a bonding strength between the lead wire and the metal member by clamping and pulling the lead wire," Applicant has been able to provide a resistance welding apparatus in which the bonding strength between the lead wire and the metal member can be checked, and poorly bonded components can be detected and immediately removed from the manufacturing line (see, for example, the paragraph bridging pages 13 and 14 of the originally filed specification).

Claim 5 has been amended to recite the features of originally filed claim 7.

The Examiner alleged that the combination of AAPA and Helms et al. teaches all of the features recited in originally filed claims 5 and 7. Specifically, in section no. 3 on pages 2 and 3 of the outstanding Office Action, the Examiner alleged:

Applicant's prior art discloses a resistance welding method for bonding a lead wire to a metal member comprising the steps of pressing a lead wire which is clamped by a first welding electrode and one second electrode (figures).

Applicant's prior art fails to teach a plurality of second electrodes, passing currents through the second welding electrodes, measuring and determining the currents, and current sensors.

However, Helms et al[.] disclose the method of using two electrodes on both sides of the middle electrode, with detectors to measure and determine the currents, for the purpose of concentrating the current to a specific area of the weld joint (col. 3, lines 5-15, lines 38-46 and col. 4, lines 23-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have two additional electrodes, with detectors to measure and determine the current as taught by Helms [et al.], in Applicant's prior art.

Applicant respectfully disagrees.

It is clear from the Examiner's description of the rejection of claims 5 and 7 under 35 U.S.C. § 103(a) as allegedly being unpatentable over AAPA in view of Helms et al. quoted above, that the Examiner has completely ignored the feature of "an inspection lead-wire chuck for checking a bonding strength between the lead wire and the metal

Serial No. 10/725,132  
November 9, 2005  
Reply to the Office Action dated August 9, 2005  
Page 8 of 9

member by clamping and pulling the lead wire" as recited in claim 5, as amended, and similarly recited in originally filed claim 7.

In fact, neither AAPA nor Helms et al. teaches or suggests any device for checking the bonding strength between a lead wire and a metal member. Neither AAPA nor Helms et al. teaches or suggests anything at all about checking the bonding strength between a lead wire and a metal member, or that the bonding strength between a lead wire and a metal member could or should be checked. Thus, AAPA and Helms et al. certainly fail to teach or suggest the feature of "an inspection lead-wire chuck for checking a bonding strength between the lead wire and the metal member by clamping and pulling the lead wire" as recited in Applicant's claim 5.

Accordingly, Applicant respectfully submits that AAPA and Helms et al., applied alone or in combination, fail to teach or suggest the unique combination and arrangement of method steps and features recited in Applicant's claim 5.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 5 under 35 U.S.C. § 103(a) as being unpatentable over AAPA in view of Helms et al.

In view of the foregoing remarks, Applicant respectfully submits that claims 1, 5 and 14 are allowable. Claims 2, 4, 6, 8-13 and 15-19 depend upon claims 1, 5 and 14, and are therefore allowable for at least the reasons that claims 1, 5 and 14 are allowable.

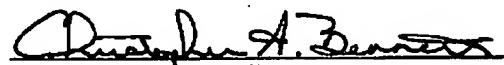
In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

Serial No. 10/725,132  
November 9, 2005  
Reply to the Office Action dated August 9, 2005  
Page 9 of 9

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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